AMENDMENTS TO THE DRAWINGS

Figures 1, 3, 4, and 5 have been amended to replace filled-circles with empty circles as indicated in the Office Action.

REMARKS

This Amendment is filed in response to the nonfinal office action dated June 11, 2008 (the Office Action).

The Drawings have been amended as indicated above. Acceptance of the drawings is requested.

The specification has been amended as indicated above. Acceptance of the specification is requested.

Claim 36 has been cancelled herein. Claims 34, 41, 42, and 64-67, have been amended. New claims 95-101 were added.

Amended claim 34 is directed to attaching monomers to polysaccharides to make polysaccharide macromers and thereafter polymerizing the macromers in an organic solvent into a three-dimensional crosslinked hydrogel that either defines a hollow cylinder, wherein the cylinder is formed during polymerization of the polysaccharide macromers, or encapsulates an inert medical device in the hydrogel, e.g., as at page 21 lines 4-7 or page 23 lines 18-24.

Claims 41, 42, 64, 65, and 67 were amended for antecedent basis.

Claim 66 was amended to claim polysaccharide macromers with a quaternary ammonium cation, e.g., as at page 22 line 20.

New claim 95 recites polymerizing the macromers in an organic solvent into a three-dimensional crosslinked hydrogel that defines the hollow cylinder, wherein the cylinder is formed during polymerization of the polysaccharide macromers, e.g., as at page 21 lines 4-7.

New claim 96 recites attaching monomers to polysaccharides to make polysaccharide macromers and thereafter polymerizing the macromers in an organic solvent into a three-

dimensional crosslinked hydrogel that encapsulates the inert medical device in the hydrogel, as at, e.g., page 23 lines 18-24.

New claim 97 recites the inert medical device as a knitted tube, e.g., as at Example 11 (page 63).

New claim 98 recites using a mandrel in the context of the knitted tube, e.g., as at Example 11.

New claim 99 recites the embodiment of claim 98 with heparin polysaccharides having at least 5 units per 100 mm2 activity and the hydrogel with a water content of at least about 50%, e.g., as at Example 11.

New claim 100 recites free radical polymerization as the polymerization method, e.g., as at page 34 line 5.

New claim 101 recites a hydrogel of at least about 500 microns in thickness, as at, e.g., page 34 line 16.

Claims 34, 36, 38, 39, 41, 42, 49, 56, 57, 61, and 64-67 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Yasufo et al. (U.S. Pat. No. 5,583,213) in view of Shah et al. (U.S. Pat. No. 6,248,127), Sahatjian (U.S. Pat. No. 5,135,516), WO 97/41164, WO 0013719, Guire et al. (U.S. Pat. No. 5,512,329) and Hsu (U.S. Pat. No. 5,417,969), collectively referred to herein as the Cited References.

These Cited References do not teach or suggest, as in claim 34, the method of attaching monomers to polysaccharides to make polysaccharide macromers and thereafter polymerizing the macromers in an organic solvent into a three-dimensional crosslinked hydrogel that either

defines a hollow cylinder, wherein the cylinder is formed during polymerization of the polysaccharide macromers (see also claim 95), or encapsulates an inert medical device in the hydrogel (see also claim 96).

Instead, the Cited References generally teach methods of attaching polysaccharides or other materials to a surface, which is a fundamentally distinct approach, as explained below.

Also, the Cited References do not teach or suggest polymerization of monomeric units on the macromers or free radical polymerization in the claimed context (claim 100). As explained below, polymerization results in materials with distinct properties and structures as compared to other methods.

Also, the Cited References are not directed to making hydrogels as claimed. The Application details important points of distinction between the claimed hydrogels and other materials. A hydrogel is a cross-linked material that can absorb or imbibe a water and is produced by the cross linking of one or more monomers or polymers (Application page 18 lines 8). In contrast, polysaccharides that merely react with a surface (as in the Cited References) are not forming a hydrogel.

Moreover, the claimed polymerization process provides for the polymerizable polysaccharide macromers to react with each other to form a polymer, which is a distinct physical structure not comparable to activated polysaccharides reacting directly with a surface or each other. Application, page 21 lines 4-14. The claimed materials provide for polymerization methods and for polymerized materials as opposed to coatings built up on surfaces, gelled structures, and merely aggregated, chemically crosslinked, or surface-immobilized materials. The points of distinction for polymerization are numerous. Application, page 21 line 14 to page

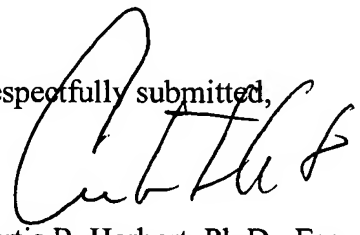
22 line 8. Another distinction for a polysaccharide covalently polymerized as a hydrogel is that the polysaccharide may be stably incorporated into the hydrogel. Application, page 22 lines 9-12.

Another point of distinction of the claimed hydrogel is that its three-dimensional structure allows it to suffer minor damage while continuing to cover the surface with polysaccharide molecules. In contrast, damage to a thin bonded coating or a material that has been merely reacted with a polysaccharide can entirely remove the polysaccharide and expose the underlying material to the body. Application, page 22 lines 21-page 23 line 7.

In view of the foregoing, it is submitted that this application is in condition for allowance. Favorable consideration and prompt allowance of the application are respectfully requested.

The Examiner is invited to telephone the undersigned if the Examiner believes it would be useful to advance prosecution.

Respectfully submitted,



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